## U.S. Navy Conducts Live-Flight Demonstration of the 3D-Printed Unmanned Aerial System (UAS)

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On 21 September, 2016, the U.S. Navy conducted a live-flight demonstration of the 3D-printed unmanned aerial system (UAS) Operational Responsiveness 1 (OR-1) in Newport, RI. The UAS flight was conducted within view of heads of navies and coast guards from nations around the globe that participated in the 22nd International Seapower Symposium (ISS-22). The purpose of the flight demonstration was to highlight the recent efforts of a joint U.S. Navy-UK Royal Navy logistics interoperability initiative using additive manufacturing (AM), commonly referred to as "3D printing." In this initiative, the U.S. Navy and UK Royal Navy exchanged digital data files for components of their respective UASs in order to demonstrate sustainment interoperability through the 3D printing of each other's UAS components. The OR-1 UAS was designed, built, and flown by the Pennsylvania State University Applied Research Laboratory (PSUARL) in support of an OSD (AT&L)-sponsored project.



An image captured from the OR-1's on-board camera at the Naval War College.

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